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Winner Micro 联盛德微电子

# WM_W800_Firmware Upgrade Guide

V1.1

WinnerMicro

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**Document modification record**

| Version revision time | | revision history | author review | |
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| V0.1 | 2019/9/25 [C] Create document | | Cuiyc | |
| V0.2 | 2020/7/8 unified font | | Cuiyc | |
| V1.0 | 2020/8/10 Upgrade version number | | Cuiyc | |
| V1.1 | 2021/5/13 | Delete w800.img, it is recommended to use it uniformly<br>w800.fls is upgraded through the serial port. | Cuiyc | |

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# 1 Introduction

## 1.1 Purpose of writing

Guide users how to upgrade different firmware to w800 chip or module through the serial port.

## 1.2 Intended readers

Developers and users of the w800 chip

## 1.3 Definition of terms

none

## 1.4 References

none

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## 2 Introduction to W800's firmware usage

After compiling the SDK of W800, it will generate firmware for upgrade:

1) w800.fls: The firmware integrating secboot and w800.img, used for (development and debugging, production programming)

Use; (It is recommended to use this firmware for serial port upgrades)

2) w800_ota.img: user OTA firmware, only for OTA upgrade.

3) w800.img: uncompressed w800 user firmware

The figure below shows the resulting firmware after compilation.

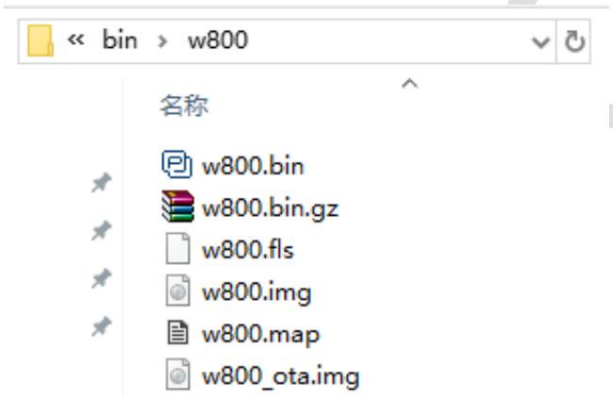



Figure 2-1

For the specific instructions of the firmware, see: "wm_w800_Firmware Generation Instructions", and then use the serial port tool

Take SecureCRT as an example to introduce how to upgrade the firmware of W800 module.

## 3 Firmware upgrade operation

**illustrate:**

1) In theory, any serial tool that supports XMODEM protocol can support w800 upgrade.

2) The w800.fls firmware update is implemented in ROM.

3) The w800.img firmware upgrade is implemented in ROM (not recommended to be used alone).

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3.1 enter upgrade

1) Power on the device to connect the serial port of the computer with UART0 of w800;

2) Turn on SecureCRT and connect to the COM port corresponding to W800 UART0;

**Note: RTS/CTS must not be checked when setting the serial port (as shown in Figure** 3-1)

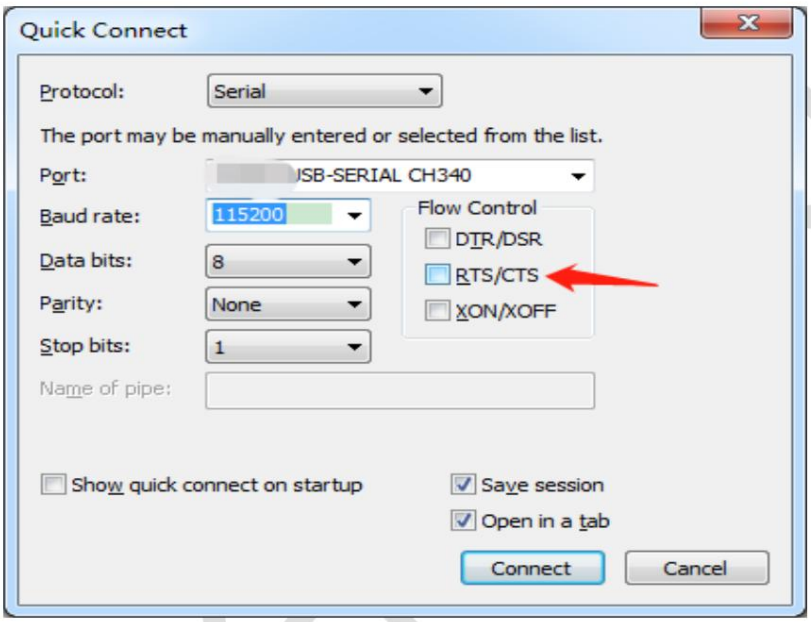



Figure 3-1

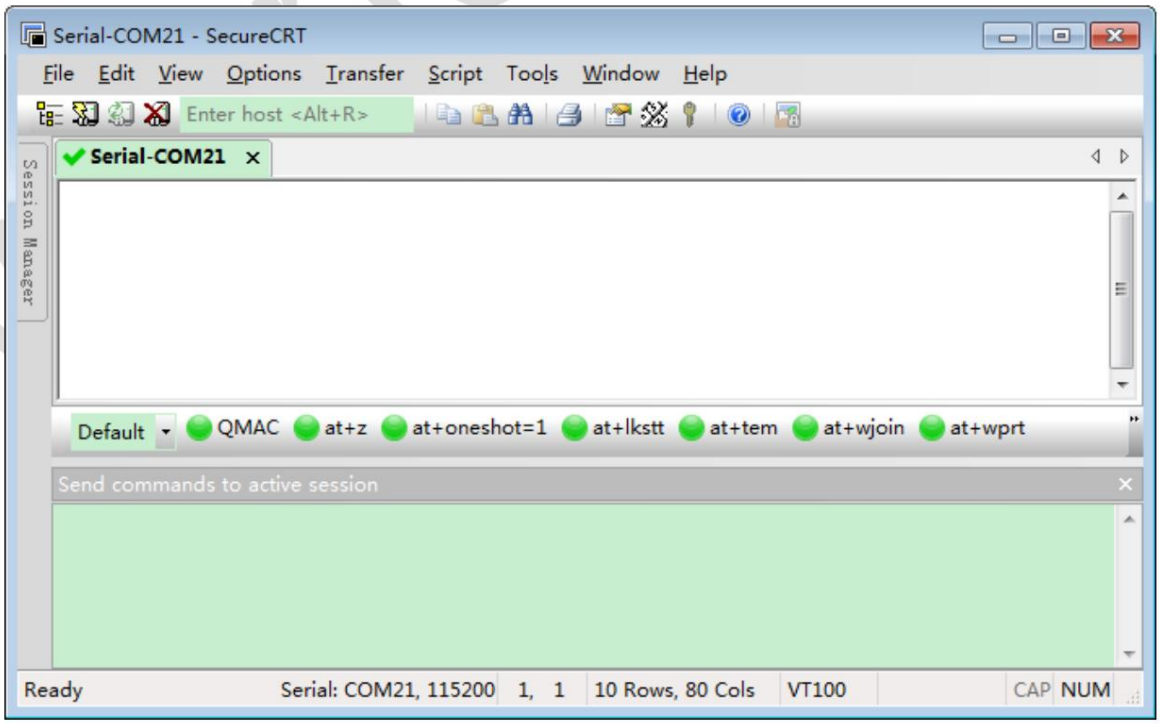



Figure 3-2

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3) Pull down the BOOTMODE (PA0) pin of the W800 module (w800.fls needs this step);

4) Press and hold the ESC key on the PC side;

5) Reset W800 module;

After the above steps, the serial port tool will continue to print the character 'C', indicating that W800 has entered the serial port upgrade process (such as

If the BOOTMODE pin is pulled down in 2), it can be released at this time).

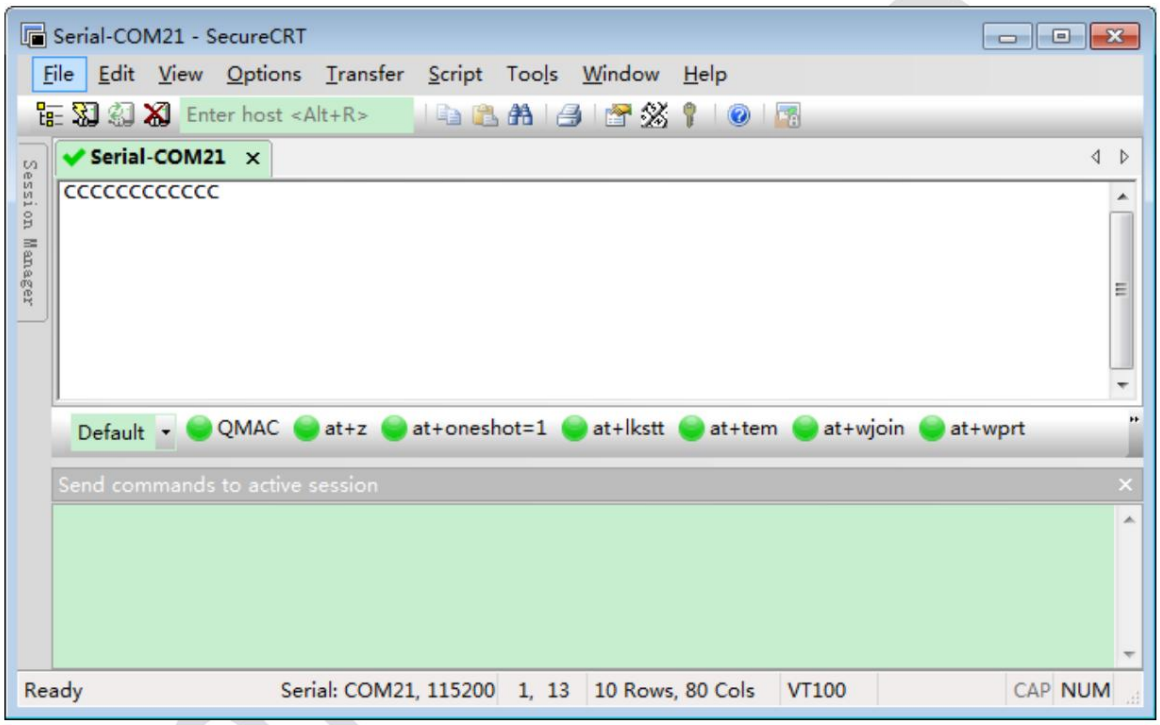



Figure 3-3

3.2 Upgrade firmware

1) Drag and drop the w800.fls file into the dialog box, as shown in the figure below after the drag and drop is completed.

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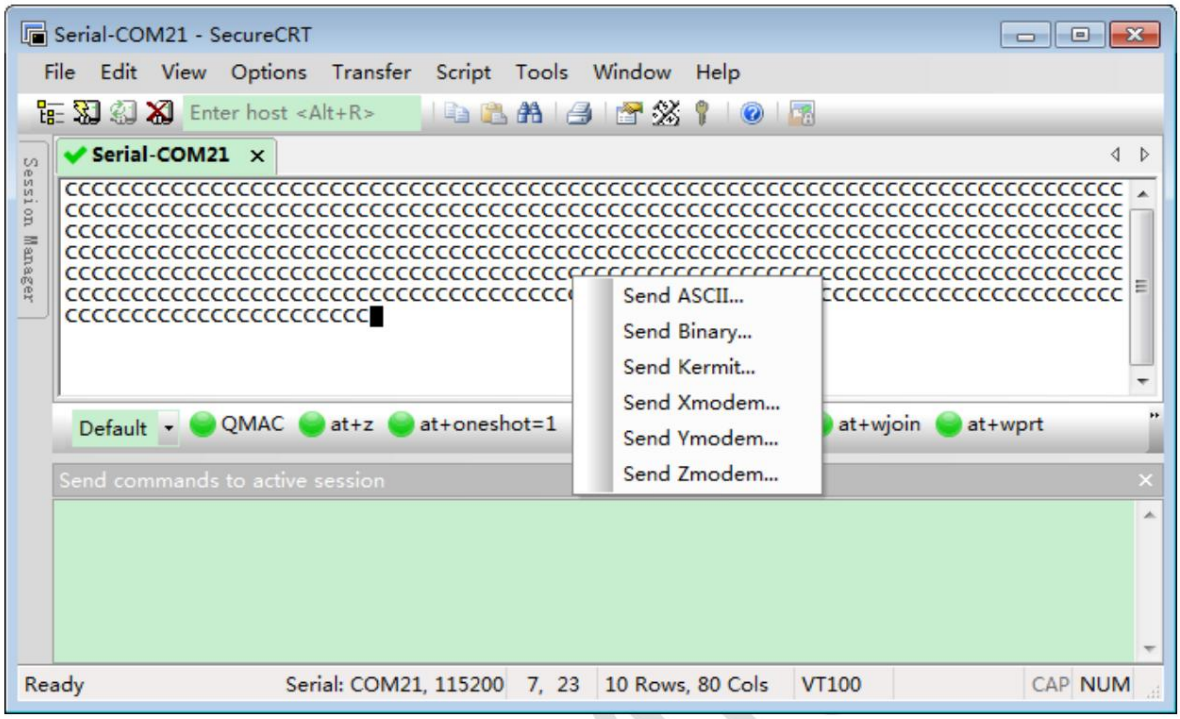



Figure 3-4

2) Select the Send Xmodem... option.

3) After clicking to select this item, the program of the device starts to upgrade the firmware, and the progress will be displayed during the upgrade.

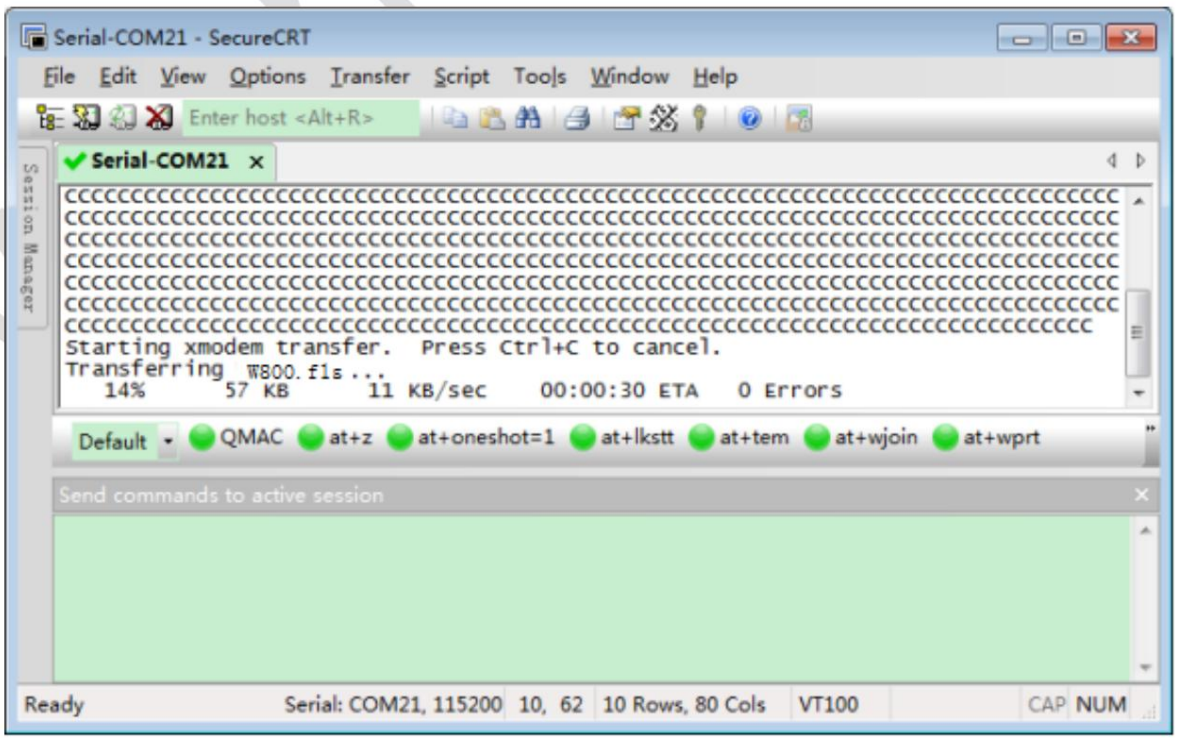



Figure 3-5

4) After the upgrade is successful, the dialog box will continue to print CCC, you need to manually reset the device, and the device will run the new

The firmware is gone.

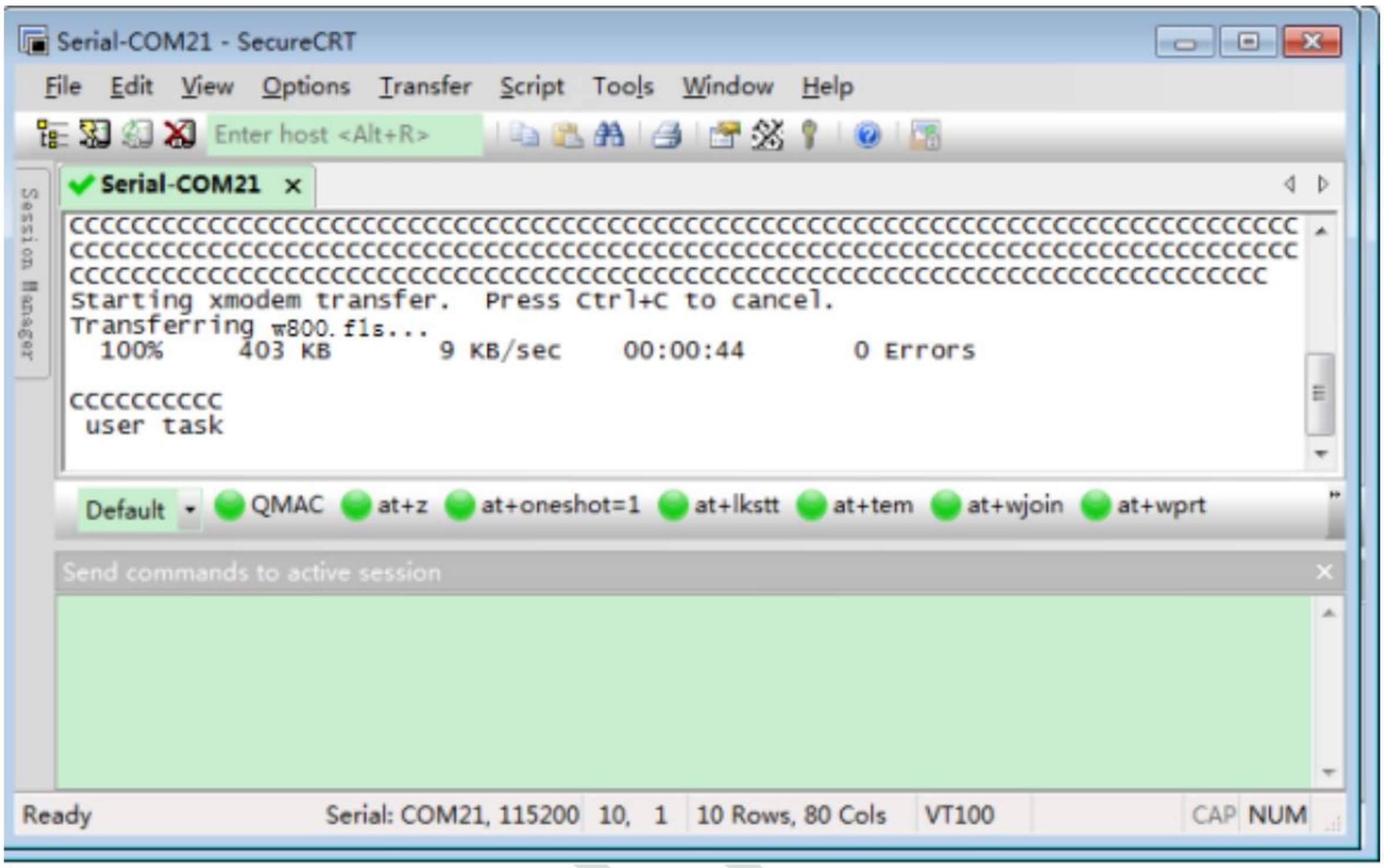



Figure 3-6